

REMARKS

Reconsideration of claims 17-29 is respectfully requested. Claims 30-33 are canceled.

The rejection of claims 17-29 under 35 USC 103 (a) as unpatentable over Refojo et al. (US 5,336,487) is respectfully traversed. The examiner states that Refojo describes using a tamponade containing silicon oil in an ophthalmic procedure, but is “silent about how the silicon oil or fluid was made.” Official Action, 10/06/06, page 3. The examiner then concludes that the claimed method is obvious under § 103 “because one of ordinary skill wishing to perform ophthalmic surgical process is taught to employ the process of Refojo et al.” Applicants respectfully disagree.

Applicants are somewhat perplexed by this rejection. The examiner correctly distinguished the difference between the teachings of Refojo and the claimed process, but he appears to have ended the § 103 analysis prematurely. The examiner has admitted that there is no teaching or suggestion in Refojo to use silicone oil that was purified by supercritical carbon dioxide extraction for ophthalmic surgical procedures. To fill this deficiency it appears that the examiner relies upon the general knowledge of one of ordinary skill. This is error. This is not a case of overcoming a deficiency in a reference by a well known fact, i.e., by judicial notice.

The examiner then commits a second error by choosing to “not give any patentable weight to the process step in which the silicone oil or fluid was made.” Official Action, 10/06/06, page 4. The examiner cannot simply choose to ignore a limitation to a method claim, particularly if that limitation is the entire essence of the invention. Applicants respectfully submit that it is improper for the examiner to simply ignore the claim recitation that the tamponade consists essentially of a “silicon oil that was purified by supercritical carbon dioxide extraction.”

Applicants are not claiming the use of a tamponade that contains any type of silicon oil, but rather, a very particular type of silicon oil that was purified by supercritical carbon dioxide extraction. Also, applicants concede that the use of silicon oil as a vitreous fluid was known, and that the purification of silicon oil by supercritical CO₂ extraction was also known at the time of the invention. What was not known, or

more importantly, not obvious to one of ordinary skill in the art, was to use a silicon oil that was purified by supercritical CO₂ extraction as a tamponade in ophthalmic surgery.

For the reasons stated, Applicants respectfully request that the rejection over Refojo under § 103 be withdrawn.

In the Final Official Action, the examiner appears to have additionally rejected claims 17-29 under 35 USC § 103(a) as obvious over Refojo in view of two Japanese publications that describe the extraction of low molecular weight oligomers in silicone oil by supercritical carbon dioxide. Applicants take the position that the examiner relies upon the Japan publications to fill the above noted deficiency in Refojo. Applicants respectfully traverse this rejection.

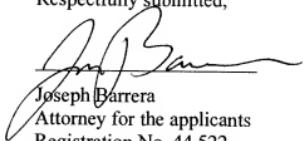
The examiner correctly notes that for medical applications, e.g., pharmaceuticals, those of ordinary skill tend to use compounds of very high purity. Therefore, if one of ordinary skill in the art of developing ophthalmic, silicone oil tamponades wanted to use a high purity silicon oil it would be *prima facie* obvious to choose a silicon oil that was purified by the process described in the Japanese publications. As stated, the “use of purified silicone oil by supercritical CO₂ extraction does not constitute a patentable distinction.” Final Official Action, page 3. Applicants respectfully disagree.

As already noted there is no description in Refojo of using supercritical CO₂ extraction to purify the crude silicon/fluorosilicon copolymer, which is preferred by Refojo over silicone oil or fluorosilicone oils alone. Instead, Refojo describes a very lengthy, messy and complex process to purify the crude copolymer. See, US 5,336,487, col. 5, lines 24-60. Like the Japanese publications, the goal is to remove the low molecular weight components in the copolymer, but rather than using supercritical extraction as described in JP 05-043699, which published in February 1993, Refojo chose to use solvent extraction with ethanol. As stated, the extraction takes six weeks, followed by rotary evaporation of the ethanol. Any remaining ethanol is removed by high vacuum distillation. The distilled product is then filtered through activated charcoal and then through a series of filters. If anything, Refojo suggests that one should use the well known and proven method of solvent extraction to be the next obvious step and not supercritical extraction as claimed.

Applicants respectfully submit that the pending rejection(s) be withdrawn.

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Respectfully submitted,



The image shows a handwritten signature in black ink, appearing to read "J. Barrera". A horizontal line is drawn through the signature.

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